

What is claimed is:

1. A method for automatic soil sampling and analysis, comprising:
  - a) moving a robot platform over the soil;
  - b) taking a soil sample using a soil probe on the robot platform;
  - c) analyzing the soil sample in a lab on the robot platform;
  - d) generating data from the soil analysis; and
  - e) transmitting the data to a remote site.
2. The method of claim 1 further comprising controlling movement of the robot platform with a global positioning system or other location systems or a combination of several location systems.
3. The method of claim 1 wherein steps a-e are performed automatically without human intervention.
4. The method of claim 1 wherein steps a-e are performed autonomously.
5. A robot for sampling and analyzing soil, comprising:
  - a ground drive system for moving the robot over the ground;
  - a control unit for controlling the ground drive system;
  - a probe for taking a soil sample;
  - a lab for analyzing the soil sample;
  - a processor for generating data from the soil analysis; and
  - a transmitter for transmitting the data to a remote site.
6. The robot of claim 5 wherein the control unit includes a global positioning system.

7. The robot of claim 5 wherein the robot is unmanned.
8. The robot of claim 5 wherein the control unit steers the robot.
9. The robot of claim 5 further comprising a conveyor for conveying the soil sample to the lab.
10. The robot of claim 5 wherein the processor is operatively connected to the ground drive system to activate and deactivate the ground drive system.
11. The robot of claim 5 wherein the processor is operatively connected to the control unit for automatic movement of the robot.
12. The robot of claim 5 wherein the processor is operatively connected to the lab for automatic analysis of the soil sample.
13. The robot of claim 5 wherein the processor is operatively connected to the transmitter for automatic transmission of the data.
14. The robot of claim 5 wherein the transmitter uses radio frequency or cell phone technology to transfer the data.